

**ECP 2008 DILI 538013 MIMO**

**MIMO**

**Final WP1 report  
including final digitisation reports  
- all partners -**

<b>Deliverable number</b>	<i>D1.6 and D1.7</i>
<b>Dissemination level</b>	<i>Public</i>
<b>Delivery date</b>	<i>4<sup>th</sup> of October 2011</i>
<b>Status</b>	<i>Final</i>
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This project is funded under the *eContentplus* programme<sup>1</sup>,  
a multiannual Community programme to make digital content in Europe more accessible,  
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<sup>1</sup> OJ L 79, 24.3.2005, p. 1.

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## 1 Scope of this report

This report combines all individual reports by digitising MIMO-partners in their last up-to-date version. As the informational architecture of the project is dynamic, new object records are continuously added. For current quantities, please refer to indications on MIMO-DB: [www.mimo-db.eu](http://www.mimo-db.eu).

## 2 Work package 1 and labour effort overview

Never before, it was undertaken to digitise entire collections of musical instruments and to make them available online through a common aggregator. Whereas every responsible for a collection had experience regarding the digitisation, esp. photography, of single objects within common museum workflows, the project of serial digitisation was an entirely new field for each partner. The labour effort overview as forwarded in the Description of Work was nevertheless quite well matched with a total of 336 person-months in comparison to the projected 345.5 person-months to digitise more than 45,000 musical instruments in public collections, manage the work package and create the MIMO digitisation standard (see below).

## 3 Work package 1 outcome

The two main outcomes of WP1 are:

- The digitised objects with their images, video files, audio files and metadata, delivered to the aggregator MIMO-DB at CM.
- The MIMO Digitisation Standard.

### 3.1 Digitisation figures and targets

In the Description of Work, different target figures were indicated, due to the different counting of musical instruments, metadata sets, or images. The most common published figures were:

- 45,000 musical instruments digitised
- 45,921 images of musical instruments
- 1,768 audio files
- 307 video clips

#### 3.1.1 Digitisation figures overview

By 26<sup>th</sup> of September 2011, the outcome figures were:

1. No. of objects available through digital images	46,123
2. No. of digital images available	80,557
3. No. of sound files available	1,757
4. No. of video files available	308

Besides a very small shortfall for sound files, the project goals in terms of digitisation have been reached. The number of images exceeds these goals by far, for institutions used the possibility of taking supplementary views as defined in The MIMO Digitisation Standard (see below) in order to enhance the representation of objects.

### 3.1.2 Digitisation figures and revision of holdings

Digitising an entire collection means leading an intense revision of objects held in a collection. The project enabled some collections to check for the first time since decades to know all instruments which constitute their holdings.

During this revision process, two contrary tendencies □ augmentation and diminution of predicted figures □ were to be observed.

The most common reasons for diminution were:

- lost instruments, especially during the Second World War, but not clearly reported as such in the written inventories or of not yet known number
- non accessible objects, e.g. because of potentially harmful contamination not known before
- items counted as instruments in the overviews, but turning out as actually being parts of instruments

Reasons of augmentation were:

- instruments thought being lost, but surfacing during the digitization process
- instruments not yet inventoried. These were included in the digitisation process
- instruments acquired during the project's lifetime and digitized on the fly

These tendencies occurred not equally with all partners, but were spread to several degrees over the different institutions. At the start of the project, many collections did not possess an adequate database documenting all of the objects. The project permitted to overcome this lack, so that by now all records of instruments are not only easily accessible, but also represent □ for some institutions for the first time since a century □ the reality of musical instruments in their possession.

### 3.1.3 Success indicators and critical mass

One issue in the forerun of the project was to define a critical mass. In the Description of Work, this has been done in comparing the MIMO target figures with figures for Europe resp. the world available through the International Directory of Musical Instrument Collections on the website of ICOM-CIMCIM.

Now, after the end of the project, criteria for a critical mass can be much more precisely defined on the base of fruitful results for sustainability. The sheer number of digitised objects as a quantitative criterion has to be completed by qualitative criteria which turned out to be of great importance. These are:

- Quality of the collections digitised
- Quality of the digital images, sound and video files as well as of the metadata records
- The added value of aggregation
- The reputation of the project partners

The efforts of the partners to maintain the MIMO-DB services for another five years and the enormous interest of ICOM-CIMCIM as the main access partner to musical instruments collections worldwide to negotiate a sustainable future partnership, as well as new partners delivering their data or preparing for joining the consortium as soon as possible, prove that a critical mass in terms of quantity and of quality has been reached.

## 3.2 The MIMO Digitisation Standard

Unlike most artwork as paintings or sculpture, musical instruments in their property of ergonomically designed tools rarely have an established way of visualization. In everyday life, they are seen in different positions from different angles, depending on if they are viewed by a musician, by his public or in a museum showcase. To make musical instruments in all

their variety clearly distinguishable and comparable, there was a need to give recommendations how to photograph them □ along with recommendations how to digitise analogical audio and video sources as well as pre-existing analogical images as slides and prints in order to ensure a sufficient quality for future preservation and presentation. To ensure a maximum documentary use of efficient photographing workflows, for most instruments second and third possible views are given to accompany the first, mandatory view:



mandatory



recommended

Hurdy gurdy (© Germanisches Nationalmuseum)

In order to satisfy this need, GNM provided a first draft of the *Definition of scanning properties and recommendations for photographing musical instruments* which was discussed and adopted by the consortium in October 2009. As the paper proved very useful and was discussed and augmented further by all partners, it was finally renamed into “The MIMO digitization standard” for shorter reference.

The final version 3 includes results from an external online-survey among members of ICOM-CIMCIM and is entirely redesigned to increase its usability. This final version is publicly available as a PDF-Download as a part of the MIMO-toolkit ([www.mimo-toolkit.com](http://www.mimo-toolkit.com)) destined to new content providers as a pragmatic and helpful document, carrying an appendix with practical hints to instrument photography furnished by all partners.

## 4 Workflows and procedures

Digitising musical instruments is a challenging procedure. Many of the objects are quite fragile, by virtue of their construction and mix of materials on one hand and often by their condition as museum objects having suffered from use and damage in their ante-museum history. Presenting them in an adequate manner in order to photograph them is a great challenge, as, in only a few cases, an instrument can just be laid down on a table in just the right position. Suspensions and supports are often necessary, and the multitude of shapes and object surfaces poses difficult demands to the photographers.

Combining adequate conservational and curatorial care with high-quality photography is thus a time-consuming undertaking in everyday’s museum work, where usually one object or few very different objects are photographed, e.g. for an image leaflet or a report about new acquisitions. Digitising entire collections required thus to develop methods which increased speed and efficiency without neglecting the care for the precious objects.

All partners invested much energy in creating the organizational infrastructure to assure a safe and fast proceeding during the photographing process. Lists of comparable objects were created, the objects were controlled and prepared by conservators, and minutes were kept for

instruments done. Quality controls of the photographs were immediately executed in order to avoid double transports and supplementary stress for the objects.

Alongside with photographing and digitizing, records for not yet recorded objects were created in  sometimes newly programmed  databases, and already existing records were formally checked and completed by the keywords furnished by WP3.

A major outcome for the collections was the in-depth revision of their holdings mentioned before. For the museum staff, it often was an amazing and fascinating experience to see objects from the reserves they had never seen before clearly  an experience which will be shared with the broad public through the publication in Europeana.

## 5 Interdependencies with other Work packages

As stated in the Description of Work, the interdependencies with other work packages proved to be manifold and essential:

- Existing metadata formats were the base for the mapping instructions developed and furnished by work package 2 (OAI Harvesting, database development and EUROPEANA Interoperability). On the reverse, the display and searchability on MIMO-DB along with the harvesting reports furnished an excellent means to help with metadata control on each institution's repository.
- Existing names of instruments, makers and places in the partners' inventories were the fundament for the word-lists collated by work package 3 (Thesauri and Classification). During the processes of digitisation and metadata control in the partners' institutions, new elements of controlled vocabulary were added. The thesaurus displayed on MIMO DB was in turn the key element to the institutions' metadata-control in order to regularize their records.
- The external evaluation of the MIMO digitisation standard paper by work package 5 (Assessment and Evaluation) revealed wishes of potential users which lead to important precisions and additions in the final version.
- The messages and newsletters issued by work package 6 (Dissemination) were constantly fed with news, figures and images from the digitisation tasks. In turn, the good reputation of the project greatly improved the visibility of the collections.

## 6 Conclusion

In an overall view, all partners managed the difficult task to digitise large quantities of precious and delicate musical instruments of all kinds, shapes, types of materials, be they European or extra-European. High quality standards were applied and fulfilled within a very tight schedule. This never before seen amount of valuable digital material is ready to come to life through the collecting work of work package 2 and the retrieval enabling work of work package 3. Thus, the infrastructure and knowledge are laid down to continue feeding new information and new images of musical instruments into Europeana via MIMO-DB.

The practical experience gained and shared throughout the project's lifetime especially in the area of the photography of musical instruments is documented in the MIMO digitisation standard paper available to the interested public and new partners.

The ardent interest of the globally acting interest group of Musical Instrument Museums and Collections, ICOM-CIMCIM, and the fact that an increasing interest of other collections to join MIMO in the near future is to be stated, shows that a critical mass of digitisation was reached in terms of quantity as well as in terms of quality.

The outcome of work package 1 can thus be considered as successful.

## 7 Individual quantitative overview by digitising partners

### 7.1 University of Edinburgh, Edinburgh (UK) UEDIN

1. No. of objects photographed	1,268
2. No. of photos taken	1,268
3. No. of scans made	333
4. No. of sound sources digitised	0
5. No. of video sources digitised	0
6. No. of objects available through digital images	4,050
7. No. of digital images available	4,050
8. No. of sound files available	100
9. No. of video files available	100

### 7.2 Germanisches Nationalmuseum, Nürnberg (DE) GNM

1. No. of objects photographed	2,792
2. No. of photos taken	6,489
3. No. of scans made	91
4. No. of sound sources digitised	32
5. No. of video sources digitised	6
6. No. of objects available through digital images	2,893
7. No. of digital images available	7,374
8. No. of sound files available	32
9. No. of video files available	6

### 7.3 University of Leipzig, Museum für Musikinstrumente, Leipzig (DE) ULEI

1. No. of objects photographed	865
2. No. of photos taken	2,405
3. No. of scans made	1,424
4. No. of sound sources digitised	15
5. No. of video sources digitised	0
6. No. of objects available through digital images	3,634
7. No. of digital images available	4,872
8. No. of sound files available	15
9. No. of video files available	0

**7.4 Africamuseum, Tervuren (BE) □ RMCA**

1. No. of objects photographed	7,497
2. No. of photos taken	7,870
3. No. of scans made	1,117
3bis. No. of objects on scans	1,029
4. No. of sound sources digitised	0
5. No. of video sources digitised	0
6. No. of objects available through digital images	8,603
7. No. of digital images available	9,925
8. No. of sound files available	0
9. No. of video files available	0

**7.5 Associazione "Amici del Museo degli Strumenti Musicali," Firenze (IT) □ AF**

1. No. of objects photographed	301
2. No. of photos taken	25
3. No. of scans made	376
4. No. of sound sources digitised	32
5. No. of video sources digitised	0
6. No. of objects available through digital images	323
7. No. of digital images available	933
8. No. of sound files available	53
9. No. of video files available	0

**7.6 Cité de la musique, Paris (FR) □ CM**

1. No. of objects photographed	1,050
2. No. of photos taken	3,845
3. No. of scans made	0
4. No. of sound sources digitised	0
5. No. of video sources digitised	0
6. No. of objects available through digital images	4,480
7. No. of digital images available	16,941
8. No. of sound files available	274
9. No. of video files available	2



**7.7 Musical instrument museum, Brussel (BE) □ MIM-BE**

1. No. of objects photographed	7,600
2. No. of photos taken	17,669
3. No. of scans made	0
4. No. of sound sources digitised	54
5. No. of video sources digitised	0
6. No. of objects available through digital images	8,080
7. No. of digital images available	17,669
8. No. of sound files available	54
9. No. of video files available	0

**7.8 Stiftung Preußischer Kulturbesitz, Berlin (DE) □ SPK**

1. No. of objects photographed	3,304
2. No. of photos taken	4,493
3. No. of scans made	523
4. No. of sound sources digitised	-
5. No. of video sources digitised	40
6. No. of objects available through digital images	6,500
7. No. of digital images available	6,923
8. No. of sound files available	500
9. No. of video files available	200

**7.9 The Stockholm Music Museum, Stockholm (SE) □ SMS-MM**

1. No. of objects photographed	2,033
2. No. of photos taken	2,773
3. No. of scans made	1,424
4. No. of sound sources digitised	555
5. No. of video sources digitised	0
6. No. of objects available through digital images	5,105
7. No. of digital images available	6,110
8. No. of sound files available	729
9. No. of video files available	0